



DES
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AND SUSTAINABILITY



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PART 70 OPERATING PERMIT

SOURCE ID: 00393

Saguaro Power Company
435 Fourth Street
Henderson, NV 89015

ISSUED ON: December 8, 2020

EXPIRES ON: December 7, 2025

Revised on: September 18, 2023

Current action: Significant Revision

Issued to:

Saguaro Power Company
435 Fourth Street
Henderson, Nevada 89015

Responsible Official:

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NATURE OF BUSINESS:

SIC code 4931, "Electric and other Services Combined"
NAICS code 221112, "Fossil Fuel Electric Power Generation"

Issued by the Clark County Department of Environment and Sustainability/Division of Air Quality in accordance with Section 12.5 of the Clark County Air Quality Regulations.

A handwritten signature in blue ink that reads "Santosh".

Santosh Mathew, Acting Permitting Manager

EXECUTIVE SUMMARY

Saguaro Power Company (Saguaro) is an electricity and steam generating operation located at 435 Fourth Street, Henderson, Nevada 89015, which is in Hydrographic Area 212 — the Las Vegas Valley. Hydrographic area 212 was designated a moderate nonattainment area for ozone on January 5, 2023, for the 2015 ozone National Ambient Air Quality Standards and designated attainment for the remaining regulated air pollutants. All generating and support processes at the site are grouped under SIC code 4931, “Electric and Other Services,” and NAICS code 221112, “Fossil Fuel Electric Power Generation.”

Saguaro is a categorical stationary source, as defined by AQR 12.2.2(j)(22). The source has a combined total fossil-fuel boiler rating of more than 250 MMBtu/hr. Saguaro operates under the Part 70 Operating Permit (OP) program and is a major stationary source for NO_x, a minor source for PM₁₀, PM_{2.5}, CO, SO₂, VOCs, and HAPs, and a source of greenhouse gas (GHG) emissions. Saguaro operates two 35-MW natural gas combined cycle combustion turbine generators (CTGs); two diesel starter engines; two auxiliary natural gas-fired boilers; a three-celled cooling tower; and four 25 MMBtu/hr supplemental-firing duct burners. In addition, Saguaro operates a 29.1 MW extraction/condensing steam turbine generator system and an ammonia storage and injection system as insignificant activities. The turbines are subject to the requirements of 40 CFR Part 60, Subparts A and GG, and the facility is subject to 40 CFR Parts 72 through 77 and 40 CFR Part 63, Subpart ZZZZ.

The following table summarizes the source’s potential to emit (PTE) of each regulated air pollutant from all emission units addressed by this Part 70 Operating Permit.

Table 1: Source-wide PTE

Pollutant	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAPs ¹	Pb	H ₂ S	GHG ²
Tons/year	31.79	31.07	158.45	90.13	3.10	12.84	9.00	0	0	544,830

¹ A major source is defined as 10 tons for any individual HAP or 25 tons for combination of all HAPs.

² Metric tons per year of carbon dioxide equivalent. GHG = greenhouse gas pollutants.

Pursuant to AQR 12.5, all terms and conditions in this permit and the attachment are federally enforceable unless explicitly denoted otherwise.

DAQ will continue to require the permittees to estimate their GHG PTE in terms of each individual pollutant (CO₂, CH₄, N₂O, SF₆ etc.) during subsequent permitting actions, and the corresponding TSDs will include these PTEs for informational purposes.

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Common Acronyms and Abbreviations

(These terms may be seen in the permit)

Acronym	Term
AQR	Clark County Air Quality Regulation
ATC	Authority to Construct
BLM	Bureau of Land Management
CFR	Code of Federal Regulations
CD	Control device
CO	carbon monoxide
CO ₂	carbon dioxide
DAQ	Division of Air Quality
DES	Clark County Department of Environment and Sustainability
DOM	date of manufacture
dscf	dry standard cubic feet
dscm	dry standard cubic meter
EPA	U.S. Environmental Protection Agency
EU	emission unit
g/gr	gram
HAP	hazardous air pollutant
HOO	Hearing Officer Order
hp	horsepower
kW	kilowatts
MMBtu/hr	Millions of British Thermal Units per Hour
MSP	Minor Source Permit
NAICS	North American Industry Classification System
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO _x	nitrogen oxides
NRS	Nevada Revised Statutes
NSPS	New Source Performance Standard
NSR	New Source Review
OP	Part 70 Operating Permit
PM _{2.5}	particulate matter less than 2.5 microns in diameter
PM ₁₀	particulate matter less than 10 microns in diameter
PSD	Prevention of Significant Deterioration
PTE	potential to emit
QAP	Quality Assurance Plan
SIP	State Implementation Plan
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
SCR	Selective Catalytic Reduction
TDS	Total Dissolved Solids
U.S.C.	United States Code
VMT	vehicle miles traveled
VEE	Visible Emissions Evaluation
VOC	volatile organic compound

1.0 EQUIPMENT

1.1 EMISSION UNITS

The stationary source covered by this Part 70 Operating Permit (OP) consists of the emission units and associated appurtenances summarized in Table 1-1. [Title V Operating Permit 12/8/2020, AQR 12.5.2.3 and AQR 12.5.6.2]

Table 1-1: List of Emission Units

EU	Rating	Description	Make	Model No.	Serial No.
A01	35 MW	Combustion Turbine Generator #1 with a fired HRSG	GE	PG6541B	295525
A02	35 MW	Combustion Turbine Generator #2 with a fired HRSG	GE	PG6541B	295524
A03	520 hp	Detroit Diesel Starter Engine, Combustion Turbine Generator #1	Detroit	71237300	12VA083956
A04	520 hp	Detroit Diesel Starter Engine, Combustion Turbine Generator #2	Detroit	71237300	12VA083901
A05	218 MMBtu/h	Auxiliary Boiler #1	Indeck/ Volcano	0-7-2000	
A06	86 MMBtu/hr	Auxiliary Boiler #2	Nebraska	NOS 2A/S- 55	032-88
A09a	7,666 gpm each	Cooling Tower, 3 cells	Thermal- Dynamics Towers Inc.	TD-3030-3- 2424CF	
A09b					
A09c					
F05	25 MMBtu/hr	Supplemental Duct Burner, Skid #1	John Zink	LDR-11-LE	S82733
F05a	25 MMBtu/hr	Supplemental Duct Burner, Skid #1	John Zink	LDR-11-LE	S82733
F06	25 MMBtu/hr	Supplemental Duct Burner, Skid #2	John Zink	LDR-11-LE	S82733
F06a	25 MMBtu/hr	Supplemental Duct Burner, Skid #2	John Zink	LDR-11-LE	S82733

1.2 INSIGNIFICANT ACTIVITIES

The units in Table 1-2 are present at this source but are insignificant activities pursuant to AQR 12.5.2.5. The emissions from these units or activities, when added to the PTE of the source, will not make the source major for any additional pollutant.

Table 1-2: Summary of Insignificant Activities

Description
Facility Maintenance (Painting)
Sandblaster
Fuel Oil Transfer Pumps
Fuel Oil Unloading
Natural Gas Metering Station

Description
Natural Gas Coalescing Filters
Lube Oil System-CTG-01
Lube Oil System-CTG-02
Lube Oil System-CTG-03
21.8 hp Water Pump
Ammonia Storage/Injection (12,000 gallons)
29.1-MW extraction/condensing steam turbine generator system ¹

¹This unit has been identified as process equipment with no emissions.

1.3 NONROAD ENGINES

Pursuant to Title 40, Part 1068.30 of the Code of Federal Regulations (40 CFR Part 1068.30), nonroad engines that are portable or transportable (i.e., not used on self-propelled equipment) shall not remain at a location for more than 12 consecutive months; otherwise, the engine(s) will constitute a stationary reciprocating internal combustion engine (RICE) and be subject to the applicable requirements of 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 60, Subpart IIII; and/or 40 CFR Part 60, Subpart JJJJ. Stationary RICE shall be permitted as emission units upon commencing operation at this stationary source.

Records of location changes for portable or transportable nonroad engines shall be maintained and shall be made available to the Control Officer upon request. These records are not required for engines owned and operated by a contractor for maintenance and construction activities as long as records are maintained demonstrating that such work took place at the stationary source for periods of less than 12 consecutive months.

Nonroad engines used on self-propelled equipment do not have this 12-month limitation or the associated recordkeeping requirements.

2.0 CONTROLS

2.1 CONTROL DEVICES

1. The permittee shall operate add-on controls at all times any affected emission unit is operating excluding periods of startup and shutdown, as indicated in Table 2-1. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

Table 2-1: Summary of Add-On Control Devices

CD	Affected EU	Device Type
CD01	A01 and A02	SCR

Cooling Tower

2. The permittee shall equip each cooling tower with drift eliminators with a manufacturer's maximum drift rate of 0.002% (EU: A09). *[Title V Renewal 11/20/2014]*

2.2 CONTROL REQUIREMENTS

General

1. The permittee must comply with the control requirements contained in this section. If there is inconsistency between standards or requirements, the most stringent standard or requirement shall apply. *[AQR 12.5.2.6(a)]*

Turbines/Duct Burners

2. The permittee shall install, maintain, and operate SCR on each of the turbine units (EUs: A01 and A02). The permittee shall operate SCR at all times the associated turbine unit is operating excluding periods of startup and shutdown. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
3. The permittee shall operate each SCR system on all turbine units in accordance with the operations and maintenance (O&M) manual. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
4. The permittee shall further control NO_x emissions from turbine units (EUs: A01 and A02) with steam injection, except during startup. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006) and Title V Renewal (00393_20131020_APP) incorporated into the Title V]*
5. The permittee shall operate each SCR system such that NO_x emissions do not exceed the limitations listed in Tables 3-3 and 3-4 excluding startups and shutdowns. *[AQR 12.5.2.6(a)]*
6. The permittee shall control SO₂ exhaust emissions from each combined cycle system by the exclusive use of pipeline quality natural gas with a maximum total sulfur content of 0.50

grains/100 dscf and good combustion practice. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

7. The permittee shall control PM₁₀ exhaust emissions from each combined cycle system by properly maintained and periodically replaced inlet air filters preceding each turbine, per O&M manual and good operating practice. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

Engines

8. The permittee shall operate and maintain each turbine starter engine in accordance with the manufacturer's operations and maintenance (O&M) manual for emissions-related components (EUs: A03 and A04). *[AQR 12.5.2.6(a)]*
9. The permittee shall combust only low sulfur (<0.05% sulfur by weight) diesel fuel in each turbine starter engines (EUs: A03 and A04). *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

Boilers

10. The permittee shall combust only natural gas and hydrogen fuel in the boiler (EU: A05). *[AQR 12.5.2.6(a)]*
11. The permittee shall combust only natural gas in the boiler (EU: A06). *[AQR 12.5.2.6(a)]*
12. The permittee shall operate and maintain each boiler (EU: A05 and A06) in accordance with the manufacturer's O&M manual for emissions-related components and good combustion practices. *[AQR 12.5.2.6(a)]*

Cooling Tower

13. The permittee shall operate and maintain the cooling tower in accordance with the manufacturer's recommendations. No chromium-containing compounds shall be used for water treatment (EU: A09). *[AQR 12.5.2.6(a)]*
14. The permittee shall maintain the cooling water such that the maximum TDS content shall not exceed 3,800 ppm (EU: A09). *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

Other

15. The permittee shall not cause, suffer, or allow any source to discharge air contaminants (or other materials) in quantities that will cause a nuisance, including excessive odors. *[MSP: September 10, 2013, Condition IV-B-10; AQR 40; and AQR 43]*

3.0 LIMITATIONS AND STANDARDS

3.1 OPERATIONAL LIMITS

1. The permittee shall limit the fuel inputs for each emission unit to the values listed in Table 3-1. *[NSR ATC 393, Modification 7 (03/19/2008) and Title V Renewal (00393_20131020_APP) incorporated into the Title V]*

Table 3-1: Fuel Limitations for Combustion Equipment

EU	Equipment	Fuel Type	Max. Hourly (MMBtu)	Max. Consecutive 12 months (MMBtu)
A01/A02	Each Combustion Turbine ¹	Natural gas	447	3,915,720
F05/F05a F06/F06a	Each Duct Burner	Natural gas	25	219,000
A05	Auxiliary Boiler	Natural gas	218	1,909,680
		Hydrogen		
A06	Auxiliary Boiler	Natural gas	86	510,000

¹Based upon 8,760 hours at 100% load at 105°F.

Turbines/Duct Burners

2. The permittee shall limit the natural gas fuel rate to 447 MMBtu/hour for each combustion turbine (EUs: A01 and A02) based on an annual average, the lower heating value (LHV), and standard conditions. Standard conditions shall be defined as 105°F and 13.78 pounds per square inch absolute (psia) at 16% relative humidity. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
3. The permittee shall limit heat input of each duct burner (EUs: F05, F05a, F06 and F06a) to 25 MMBtu/hour. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
4. A startup period for turbines (EUs: A01 and A02) is defined as the period of time of no more than 1 hour immediately following the application of a load. Startup periods shall be included in determining compliance with consecutive 12-months emissions limits for the emission units being started. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
5. A shutdown period for turbines (EUs: A01 and A02) shall begin when heat input falls below 50% of nameplate capacity and ends when combustion has ceased, the duration of the shutdown period should not exceed 60 minutes. Shutdown periods shall be included in determining compliance with consecutive 12-months emissions limits for the emission units being shutdown. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
6. Emissions from startup and shutdown events when combined with the turbine emissions during normal operations, shall not exceed the consecutive 12-months limits outlined in Table 3-2. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

7. The permittee shall use emission rates presented in the TSD for any clock hour in which a startup/shutdown event occurs, if the CEMS data does not include the actual startup/shutdown emissions. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

Engines

8. The permittee shall limit operation of each turbine starter engine (EUs: A03 and A04) to 125 hours per year based on consecutive 12-months. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

Boilers

9. The permittee shall combust only natural gas, hydrogen fuel, or a combination of natural gas and hydrogen fuel in the boiler (EU: A05). *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
10. The permittee shall limit the operation of the boiler (EU: A05) to 1,909,680 MMBtu per year of natural gas and hydrogen fuel. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*
11. A startup period of the boiler (EU: A05) is defined as the period of time of no more than one hundred (100) minutes immediately following the firing of the burner. Startup periods shall be included in determining compliance with consecutive 12-months emissions for the boiler. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*
12. A shutdown period of the boiler (EU: A05) shall begin when heat input falls below 15 percent of nameplate capacity and ends when combustion has ceased and shall not exceed 1 hour. Shutdown periods shall be included in determining compliance with consecutive 12-months emissions limits for the boiler. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*
13. The permittee shall limit the operation of the boiler (EU: A06) to 510,000 MMBtu per consecutive 12-months. Only natural gas fuel shall be combusted in the boiler. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
14. The permittee shall limit the hours of operation of the boiler (EU: A06) to 6,000 hours per any consecutive 12-months. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*

3.2 EMISSION LIMITS

1. The permittee shall, under all conditions, maintain and operate the source in a manner consistent with good air pollution control practice for minimizing emissions as required by 40 CFR Part 60.11. *[AQR 12.5.2]*
2. The permittee shall not allow actual emissions from the individual emission units to exceed the calculated PTE listed in Table 3-2 on a consecutive 12-month total and include startup and shutdown emissions, except for emission units intended only for use in emergencies. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008) and Application for Minor Revision of Part 70 OP (11/24/2015)]*

Table 3-2: Emission Unit PTE, Including Startup and Shutdowns (tons per year)

EU	Condition ¹	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
A01	8,760 hr/yr	10.95	10.95	66.58	39.42	1.18	4.03	2.01
F05, F05a ²								
A02	8,760 hr/yr	10.95	10.95	66.58	39.42	1.18	4.03	2.01
F06, F06a ²								
A03	125 hr/yr	0.07	0.07	1.01	0.22	0.01	0.08	0.01
A04	125 hr/yr	0.07	0.07	1.01	0.22	0.01	0.08	0.01
A05	8,760 hr/yr	6.66	6.66	13.94	0.86	0.57	4.47	4.47
A06	6,000 hr/yr	1.29	1.29	9.33	9.99	0.15	0.15	0.49
A09	8,760 hr/yr	1.80	1.08	0	0	0	0	0

¹The quantities in this column are not intended as enforceable permit limits unless stated otherwise in this permit.

²The supplemental-firing duct burners make up the HRSG.

Table 3-3: Emission Rate (pounds per hour) Limitations, Excluding Startup and Shutdowns

EU	PM ₁₀	PM _{2.5}	NO _x	CO	SO ₂	VOC	HAP
A01	2.50	2.50	15.20	9.00	0.27	0.92	0.46
A02	2.50	2.50	15.20	9.00	0.27	0.92	0.46
A05	1.52	1.52	3.18	0.20	0.13	1.02	1.02
A06	0.43	0.43	3.11	3.33	0.05	0.05	0.16

Table 3-4: Emission Concentration (ppmvd) Limitations, Excluding Startup and Shutdowns

EU	O ₂ Standard	NO _x (ppmvd)	CO (ppmvd)
		Natural Gas	Natural Gas
A01 ¹	15%	10	10
F05, F05a			
A02 ¹	15%	10	10
F06, F06a			
A05 ²	3%	12	1.2
A06	3%	30	400

¹Emissions from the combustion of natural gas are calculated using a 4-hour rolling average (except CO for EU: A05), not to include startup or shutdown.

²CO for EU: A05 is based on 24 hours.

Turbines/Duct Burners

- The permittee shall not exceed emission rate limits listed in Table 3-3 for NO_x and CO for the turbines (EUs: A01 and A02) as determined by the CEMS as described in Section 4.1, excluding any startup or shutdown period. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*
- The permittee shall operate each turbine and duct burner combination (EUs: A01, F05, F05a, A02, F06, and F06a) such that they do not emit NO_x in concentrations greater than 10 ppmvd

at 15% O₂ during any 4-hour rolling averaging period, excluding any startup or shutdown period. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*

5. The permittee shall operate each turbine and duct burner combination (EUs: A01, F05, F05a, A02, F06, and F06a) such that they do not emit CO in concentrations greater than 10 ppmvd at 15% O₂ during any 4-hour rolling averaging period, excluding any startup or shutdown period. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*

Boilers

6. The permittee shall not exceed emission rate limits listed in Table 3-3 for NO_x and CO for the boiler (EU: A05) as determined by the CEMS as described in Section 4.1, excluding any startup or shutdown period. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
7. The permittee shall not exceed emission concentration limits listed in Table 3-4 for NO_x, for any 4-hour rolling averaging period, or CO, for any 24-hour rolling averaging period, for the boiler (EU: A05) as determined by the CEMS as described in Section 4.1, excluding any startup or shutdown period. *[NSR ATC 393 Modification 6, Amendment 1 (10/04/2006)]*
8. The permittee shall operate the boiler (EU: A05) such that it emits neither more than 12 ppmvd NO_x, during a 4-hour rolling average, nor 1.2 ppmvd CO, during a 24-hour rolling average, corrected to 3% O₂, excluding any startup or shutdown period. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*
9. The permittee shall not exceed emission rate limits listed in Table 3-3 for NO_x and CO for the boiler (EU: A06), excluding any startup or shutdown period. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*
10. The permittee shall operate the boiler (EU: A06) such that it emits neither more than 30 ppmvd NO_x nor 400 ppmvd CO, corrected to 3% O₂, excluding any startup or shutdown period. *[NSR ATC 393, Modification 7, Revision 2 (12/15/2008)]*

Other

11. The permittee shall not discharge into the atmosphere, from any emission unit, any air contaminant in excess of an average of 20% opacity for a period of more than six consecutive minutes (EUs: A01-A06, A09, F05, F05a, F06, and F06a). *[AQR 26.1]*

4.0 COMPLIANCE DEMONSTRATION REQUIREMENTS

4.1 MONITORING

Visible Emissions [AQR 12.5.2.6(d) & AQR 12.5.2.8]

1. The Responsible Official shall sign and adhere to the *Visible Emissions Check Guidebook* and keep a copy of the signed guide on-site at all times.
2. The permittee shall conduct a quarterly visual emissions check of each diesel fuel-burning emission unit (EUs: A03, and A04) while it is in operation.
3. If no plume appears to exceed the opacity standard during the visible emissions check, the date, location, and results shall be recorded, along with the viewer's name.
4. If a plume appears to exceed the opacity standard, the permittee shall do one of the following:
 - a. Immediately correct the perceived exceedance, then record the first and last name of the person who performed the emissions check, the date the check was performed, the unit(s) observed, and the results of the observation; or
 - b. Call a certified Visible Emissions Evaluation (VEE) reader to perform a U.S. Environmental Protection Agency (EPA) Method 9 evaluation.
 - i. For sources required to have a certified reader on-site, the reader shall start Method 9 observations within 15 minutes of the initial observation. For all other sources, the reader shall start Method 9 observations within 30 minutes of the initial observation.
 - ii. If no opacity exceedance is observed, the certified VEE reader shall record the first and last name of the person who performed the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each emission unit that was initially perceived to have exceeded the opacity limit, and the record shall also indicate:
 - (1) The cause of the perceived exceedance;
 - (2) The color of the emissions; and
 - (3) Whether the emissions were light or heavy.
 - iii. If an opacity exceedance is observed, the certified VEE reader shall take immediate action to correct the exceedance. The reader shall then record the first and last name of the person performing the VEE, the date the VEE was performed, the unit(s) evaluated, and the results. A Method 9 VEE form shall be completed for each reading identified, and the record shall also indicate:
 - (1) The cause of the exceedance;

- (2) The color of the emissions;
 - (3) Whether the emissions were light or heavy;
 - (4) The duration of the emissions; and
 - (5) The corrective actions taken to resolve the exceedance.
5. Any scenario of visible emissions noncompliance can and may lead to enforcement action.

CEMS [AQR 12.5.2.6(d) & AQR 12.5.2.8]

6. To demonstrate continuous direct compliance with all emission limitations for NO_x and CO specified in this permit, the permittee shall install, calibrate, maintain, operate, and certify CEMS for NO_x, CO, and O₂ on each stationary gas turbine unit (EUs: A01 and A02) in accordance with 40 CFR Part 60 and 40 CFR Part 75. Each CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: [40 CFR 60.334 and AQR 12.5.2.6(d)]
- a. Exhaust gas concentrations of NO_x, CO, and diluent O₂ for all turbine units (EUs: A01 and A02);
 - b. Hourly mass emissions of NO_x and CO;
 - c. 4-hour rolling averages of exhaust gas concentration for each of NO_x, CO, diluent O₂;
 - d. Exhaust gas flow rate (by direct or indirect methods);
 - e. Fuel flow rate;
 - f. Hours of operation; and
 - g. Hours of downtime of the CEMS.
7. The permittee shall install, calibrate, maintain, operate, and certify CEMS for NO_x, CO, and O₂ on the boiler (EU: A05) in accordance with 40 CFR Part 60. Each CEMS shall include an automated data acquisition and handling system. Each system shall monitor and record at least the following data: [AQR 12.5.2.6(d)]
- a. 4-hour rolling averages of exhaust gas concentration for NO_x and diluent O₂;
 - b. 24-hour rolling averages of exhaust gas concentration for CO and diluent O₂;
 - c. Exhaust gas flow rate (by direct or indirect methods);
 - d. Fuel flow rate;
 - e. Hours of operation;
 - f. Hourly, daily and quarterly accumulated mass emissions of NO_x and CO; and
 - g. Hours of downtime of the CEMS.

8. The permittee shall maintain and adhere to the latest Quality Assurance Plan (QAP) for all CEMS submitted to and approved by DAQ, which shall include auditing and reporting schedules, design specifications, and other quality assurance requirements for each CEMS (EUs: A01 and A02). *[40 CFR Part 75]*
9. The permittee shall submit all periodic audit procedures and QA/QC procedures for CEMS to conform to the provisions of 40 CFR Part 60, Appendix F, or 40 CFR Part 75, Appendix B, as applicable (EUs: A01, A02, and A05).
10. The permittee shall conduct a relative accuracy test audit (RATA) of the CO, NO_x, and diluent O₂ or CO₂ CEMS at least annually, or the frequency specified in 40 CFR 60 and 75, as applicable (EUs: A01, A02, and A05). *[AQR 12.5.2.6(d)]*
11. The permittee shall not have to perform a RATA if the actual hours of operation of the emission unit are 0 (EUs: A01, A02, and A05). *[AQR 12.5.2.6(d)]*

Boilers

12. The permittee shall install a fuel flow meter for the boiler (EU: A06) and shall monitor the monthly fuel consumption. *[AQR 12.5.2.6(d)]*
13. The permittee shall operate the boiler with a nonresettable hour meter (or other device the Control Officer has approved in advance), monitor its hours of operation, and calculate them on a monthly basis as a consecutive 12-month total (EU: A06). *[AQR 12.5.2.6(d)]*
14. The permittee shall conduct a burner efficiency test (boiler tune-up) and inspection on the auxiliary boilers (EUs: A05 and A06) semiannually. *[AQR 12.5.2.6(d)]*
15. The permittee shall conduct burner efficiency test in accordance with the manufacturer's recommendations and specifications for good combustion practices. The permittee may use an alternative method to determine burner efficiency upon prior approval from the Control Officer. *[AQR 12.5.2.6(d)]*
16. The permittee may perform a burner efficiency test once each calendar year if the actual hours of operation are less than 50. To exercise this option, the permittee must install an hour meter and begin keeping records before the start of the calendar year (EUs: A05 and A06). *[AQR 12.5.2.6(d)]*
17. The permittee shall not have to perform a burner efficiency test if the actual hours of operation are 0. To exercise this option, the permittee must install an hour meter and begin keeping records before the start of the calendar year (EUs: A05 and A06). *[AQR 12.5.2.6(d)]*
18. The permittee may replace one contemporaneously required burner efficiency test with a performance test that has acceptable results (EUs: A05 and A06). *[AQR 12.5.2.6(d)]*

Cooling Tower

19. The permittee shall monitor the TDS of the cooling tower recirculation water monthly using a conductivity meter or another device the Control Officer has approved in advance (EU: C01). *[AQR 12.5.2.6(d)]*

4.2 TESTING

1. At the Control Officer's request, the permittee shall test (or have tests performed) to determine emissions of air contaminants from any source whenever the Control Officer has reason to believe that an emission in excess of those allowed by the AQRs is occurring. The Control Officer may specify testing methods to be used in accordance with good professional practice. The Control Officer may observe the testing. All tests shall be conducted by reputable, qualified personnel. *[AQR 4.2]*
2. At the Control Officer's request, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants. *[AQR 4.2]*
3. The permittee shall submit to the Control Officer for approval a performance testing protocol that contains testing, reporting, and notification schedules, test protocols, and anticipated test dates no less than 45 days, but no more than 90 days, before the anticipated date of the performance test unless otherwise specified in this permit. *[AQR 12.5.2.8]*
4. The permittee shall submit to EPA for approval any alternative test methods EPA has not already approved to demonstrate compliance with a requirement under 40 CFR Part 60. *[40 CFR Part 60.8(b)]*
5. Performance testing is subject to 40 CFR Part 60.8 (as amended), Subparts A, Db, Dc, and GG and Clark County Department of Air Quality Guideline for Source Testing (9/19/2019). Performance testing shall be the instrument for determining initial and subsequent compliance with the emission limitations set forth in Tables 4-1 this permit. *[AQR 12.5.2.6(d) and 40 CFR Part 60.335]*

Turbines/Duct Burners

6. The permittee shall conduct initial performance tests for NO_x and CO while using natural gas on each of the turbine units (EUs: A01 and A02) to demonstrate compliance with the emission limitations. Table 4-1 summarizes performance test methods, including for NO_x and CO, for the turbine package units. The initial performance tests for both units were completed on April 7, 2008. *[AQR 12.5.2.6(d)]*

Table 4-1: Performance Testing Requirements (40 CFR Part 60, Appendix A)

Test Point	Pollutant	Method
Turbine Exhaust Stack	NO _x	Chemiluminescence Analyzer (EPA Method 7E)
Turbine Exhaust Stack	CO	EPA Method 10
Turbine Exhaust Stack	PM ₁₀	EPA Method 201/202 or 201A/202
Turbine Exhaust Stack	Opacity	EPA Method 9
Stack Gas Parameters	—	EPA Methods 1, 2, 3, 4

7. Subsequent performance testing for NO_x and CO while firing natural gas in the turbines (EUs: A01 and A02) shall be conducted upon written notification from the Control Officer. *[AQR 12.5.2.6(d)]*

Boilers

8. The permittee shall conduct a performance test on the auxiliary boilers (EUs: A05 and A06) to demonstrate initial compliance with the CO and NO_x emissions limitations. Table 4-2 summarizes performance test methods, including for NO_x and CO, for the turbine package units no later than 180 days after initial startup and within 60 days of achieving the maximum production rate at which the affected facility will be operated. This testing was completed for EUs: A05 and A06 in February 2016 and February 2017, respectively.
9. An initial performance test shall be performed on EU: A05 after installation of the low-NO_x burner coupled with the CO oxidation catalyst. This testing has been completed for EU: A05. [AQR 12.5.2.6(d), NSR Mod. 7, Rev 2]
10. Subsequent performance testing shall be conducted on the auxiliary boiler (EU: A06) at least once every five years.
11. Subsequent performance testing for NO_x and CO while firing natural gas in the boiler (EU: A05) may be required by the Control Officer. [AQR 12.5.2.6(d)]

Table 4-2: Performance Testing Requirements (40 CFR Part 60, Appendix A)

Test Point	Pollutant	Method
Boiler Exhaust Stack	NO _x	Chemiluminescence Analyzer (EPA Method 7E)
Boiler Exhaust Stack	CO	EPA Method 10
Stack Gas Parameters	—	EPA Methods 1, 2, 3, 4

12. The permittee shall submit a report describing the results of each performance test to the Control Officer within 60 days of the end of the test. [AQR 12.5.2.8]
13. The permittee of any stationary source that fails to demonstrate compliance with emissions standards or limitations during any performance test shall submit a compliance plan to the Control Officer within 90 days of the end of the performance test. [AQR 12.5.2.8(a)]
14. The Control Officer may require additional performance testing when operating conditions appear inadequate to demonstrate compliance with the emissions and/or limitations in this permit. [AQR 12.5.2.8(a)]

4.3 RECORDKEEPING

1. The permittee shall keep records of all inspections, maintenance, and repairs, as required by this permit. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
2. The permittee shall comply with all applicable recordkeeping requirements of 40 CFR Part 60, Subparts Db, Dc, and Gg; 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 72.9(f); 40 CFR Part 75; and any other applicable regulations.
3. All records, logs, etc., or copies thereof, shall be kept on-site for a minimum of five years from the date the measurement, or data was entered. [AQR 12.5.2.6(d) and AQR 12.5.2.8]

4. Records and data required by this permit to be maintained by the permittee may be audited at any time by a third party selected by the Control Officer. [AQR 4.1]

4.3.1 Records and Data

1. At a minimum, the permittee shall create and maintain the records identified in Section 4.3.1, all of which must be producible on-site to the Control Officer's authorized representative upon request and without prior notice during the permittee's hours of operation. [AQR 12.5.2.6(d) and AQR 12.5.2.8]
2. The permittee shall maintain the following records for reporting: [AQR 12.5.2.6(d) and AQR 12.5.2.8]

Turbines/Duct Burners

- a. Notifications, monitoring system performance, malfunctions, corrective actions taken, etc., as required by 40 CFR Part 60.7;
- b. Monthly, consecutive 12-month total hours of operation for each turbine, as applicable, for each duct burner;
- c. Monthly, consecutive 12-month total quantity of natural gas consumed in each gas turbine in MMBtu;

Boilers

- d. Monthly, consecutive 12-month total quantity of combined fuel input of natural gas and hydrogen fuel in the boiler (EU: A05) in MMBtu;
- e. Monthly, consecutive 12-month total quantity of natural gas fuel input to the boiler (EU: A06) in MMBtu;
- f. Monthly, consecutive 12-month total hours of operation of the boiler (EU: A06);

Engines

- g. Monthly, consecutive 12-month total hours of operation for each starter engine (EUs: A03 and A04);

CEMS

- h. CEMS audit results or accuracy checks, corrective actions, etc., as required by 40 CFR Part 60, 40 CFR Part 75, and the CEMS quality assurance plan (EUs: A01, A02 and A05);
- i. Time, duration, nature and probable cause of any CEMS downtime and corrective actions taken as required by 40 CFR Part 75, including a CEMS monitoring plan (EUs: A01 and A02);
- j. Monthly CEMS NO_x and CO (EUs: A01, A02 and A05);

Other

- k. Monthly, consecutive 12-month total emissions for each emission unit in tons per year (EUs: A01, A02, F05, F05a, F06, F06a, A05 and A06);
 - l. Deviations from permit requirements resulting in excess emissions (report as required by Section 4.4);
 - m. Deviations from permit requirements not resulting in excess emissions (report semiannually); and
3. The permittee shall maintain the following records: *[AQR 12.5.2.6(d) and AQR 12.5.2.8]*

Turbines/Duct Burners

- a. Dates, times, and duration of each turbine startup, shutdown, and testing/tuning event (EUs: A01 and A02);
- b. Startup and shutdown emissions per turbine (EUs: A01, A02) in pounds per hour and yearly emissions, including startup, shutdown and normal operations, in tons per each consecutive 12-month period;
- c. Sulfur content of natural gas, as certified by the supplier. Sulfur content of natural gas fuel shall be verified and documented by the permittee at least quarterly, and verifications shall be based on reports or written data from the gas supplier, as required by 40 CFR Part 60; *[AQR 12.5.2.6(d)]*

Boilers

- d. Burner efficiency test results (EUs: A05 and A06)
- e. Dates, times, and duration of each startup and shutdown cycle (EU: A05);
- f. Monthly, consecutive 12-month total quantity of natural gas and hydrogen fuel used for the boiler in MMBtu (EU: A05);
- g. Monthly, consecutive 12-month total quantity of natural gas fuel used for the boiler in MMBtu (EU: A06);

Cooling Tower

- h. Monthly TDS content of cooling tower circulation water, when operating (EU: A09);

CEMS

- i. Summary of CEMS records collected by the automated data acquisition and handling system required by Section 4.1 of this permit (EUs: A01, A02, and A05);
- j. All CEMS information required by 40 CFR Part 75, including a CEMS monitoring plan, as well as time, duration, nature, and probable cause of any CEMS downtime and corrective actions taken;

- k. Quality assurance plan for all CEMS;
- l. All CEMS information required by 40 CFR Part 60, including a CEMS monitoring plan;
- m. Results of RATA auditing;

Other

- n. Results of the last performance test conducted, in addition to any other performance tests conducted within the last five years (EUs: A01, A02, and A06);
- o. Annual copies of all reports, compliance certifications, other submissions, and all records made or required under the Acid Rain Program;
- p. Copies of all documents used to complete an Acid Rain permit application, and any other submission under the Acid Rain Program to demonstrate compliance with the program requirements;
- q. Certificates of representation for the designated representative and the alternative designated representative that meet all requirements of 40 CFR Part 72.24;
- r. Records of location changes for nonroad engines, if applicable; and
- s. Log of visible emission checks;
- t. For all inspections, visible emission checks, and testing required under monitoring, all the logs, reports, and records shall include at least the date and time, the name of the person performing the action, the results or findings, and the type of corrective action taken (if required). [AQR 12.5.2.6(d)].

4.4 REPORTING AND NOTIFICATIONS

- 1. The permittee shall certify compliance with the terms and conditions contained in this Part 70 OP, including emission limitations, standards, work practices, and the means for monitoring such compliance. [AQR 12.5.2.8(e)]
- 2. The permittee shall submit compliance certifications annually in writing to the Control Officer (4701 W. Russell Road, Suite 200, Las Vegas, NV 89118) and the Region 9 Administrator (Director, Air and Radiation Divisions, 75 Hawthorne St., San Francisco, CA 94105). A compliance certification for each calendar year will be due on January 30 of the following year and shall include the following: [AQR 12.5.2.8(e)]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. These methods and means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements described in 40 CFR Part 70.6(a)(3). If necessary, the permittee shall also identify any other material information that must be

- included in the certification to comply with Section 113(c)(2) of the Clean Air Act, which prohibits knowingly making a false certification or omitting material information; and
- c. The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was continuous or intermittent. The certification shall be based on the methods or means designated in (b) above. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify, as possible exceptions to compliance, any periods during which compliance was required and in which an excursion or exceedance, as defined under 40 CFR Part 64, occurred.
3. The permittee shall report to the Control Officer any startup, shutdown, malfunction, emergency, or deviation that causes emissions of regulated air pollutants in excess of any limits set by regulations or this permit. The report shall be in two parts, as specified below: *[AQR 12.5.2.6(d)(4)(B); AQR 25.6.1]*
 - a. Within 24 hours of the time the permittee learns of the excess emissions, the permittee shall notify DAQ by phone at (702) 455-5942, by fax at (702) 383-9994, or by email at airquality@clarkcountynv.gov.
 - b. Within 72 hours of the notification required by paragraph (a) above, the permittee shall submit a detailed written report to DAQ containing the information required by AQR 25.6.3.
 4. With the semiannual monitoring report, the permittee shall report to the Control Officer all deviations from permit conditions that do not result in excess emissions, including those attributable to malfunction, startup, or shutdown. Reports shall identify the probable cause of each deviation and any corrective actions or preventative measures taken. *[AQR 12.5.2.6(d)(4)(B)]*
 5. The owner or operator of any source required to obtain a permit under AQR 12 shall report to the Control Officer emissions in excess of an applicable requirement or emission limit that pose a potential imminent and substantial danger to public health and safety or the environment as soon as possible, but no later than 12 hours after the deviation is discovered and submit a written report within two days of the occurrence. *[AQR 25.6.2]*
 6. The permittee shall submit all compliance certifications to the U.S. Environmental Protection Agency (EPA) and to the Control Officer. *[AQR 12.5.2.8(e)(4)]*
 7. Any application form, report, or compliance certification submitted to the Control Officer pursuant to the permit or the AQRs, shall contain a certification by a Responsible Official, with an original signature, of truth, accuracy, and completeness. This certification, and any other required under AQR 12.5, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. *[AQR 12.5.2.6(l)]*
 8. The permittee shall furnish to the Control Officer, in writing and within a reasonable time, any information that the Control Officer may request to determine whether cause exists for revising, revoking and reissuing, or terminating the permit, or to determine compliance with

the permit. Upon request, the permittee shall also furnish to the Control Officer copies of records that the permit requires keeping. The permittee may furnish records deemed confidential directly to the Administrator, along with a claim of confidentiality. *[AQR 12.5.2.6(g)(5)]*

9. At the Control Officer's request, the permittee shall provide any information or analyses that will disclose the nature, extent, quantity, or degree of air contaminants that are or may be discharged by the source, and the type or nature of control equipment in use. The Control Officer may require such disclosures be certified by a professional engineer registered in the state. In addition to this report, the Control Officer may designate an authorized agent to make an independent study and report on the nature, extent, quantity, or degree of any air contaminants that are or may be discharged from the source. An agent so designated may examine any article, machine, equipment, or other contrivance necessary to make the inspection and report. *[AQR 4.1]*
10. The permittee shall submit annual emissions inventory reports based on the following: *[AQR 18.6.1 and AQR 12.5.2.4]*
 - a. The annual emissions inventory must be submitted to DAQ by March 31 of each calendar year (if March 31 falls on a Nevada or federal holiday, or on any day the office is not normally open for business, the submittal shall be due on the next regularly scheduled business day);
 - b. The calculated actual annual emissions from each emission unit shall be reported even if there was no activity, along with the total calculated actual annual emissions for the source based on the emissions calculation methodology used to establish the potential to emit (PTE) in the permit or an equivalent method approved by the Control Officer prior to submittal; and
 - c. As the first page of text, a signed certification containing the sentence: "I certify that, based on information and belief formed after reasonable inquiry, the statements contained in this document are true, accurate, and complete." This statement shall be signed and dated by a Responsible Official of the company (a sample form is available from DAQ).
11. Stationary sources that emit 25 tons or more of nitrogen oxide (NO_x) and/or emit 25 tons or more of volatile organic compounds (VOC) from their emission units, insignificant activities, and exempt activities during a calendar year shall submit an annual emissions statement for both pollutants. Emissions statements must include actual annual NO_x and VOC emissions from all activities, including emission units, insignificant activities and exempt activities. Emissions statements are separate from, and additional to, the calculated annual emissions reported each year for all regulated air pollutants (aka Emissions Inventory). *[AQR 12.9.1]*
12. The permittee shall comply with all applicable notification and reporting requirements of 40 CFR Part 60, Subparts Db, Dc, and Gg; 40 CFR Part 63, Subpart ZZZZ; 40 CFR Part 72.9(f); 40 CFR Part 75. *[AQR 12.5.2.6(d)]*
13. The permittee shall submit semiannual monitoring reports to DAQ. *[AQR 12.5.2.6(d) and AQR 12.5.2.8]*

14. The following requirements apply to semiannual reports: [AQR 12.5.2.6(d) and AQR 12.5.2.8]
- The report shall include items listed in Section 4.3.1.
 - The report shall be based on a calendar semiannual period, which includes partial reporting periods.
 - The report shall be received by DAQ within 30 calendar days after the semiannual period.
15. Regardless of the date of issuance of this OP, the source shall comply with the schedule for report submissions outlined in Table 4-3. [AQR 12.5.2.6(d) and AQR 12.5.2.8]

Table 4-3: Required Submission Dates for Various Reports

Required Report	Applicable Period	Due Date
Semiannual report for 1 st six-month period	January, February, March, April, May, June	July 30 each year ¹
Semiannual report for 2 nd six-month period; any additional annual records required	July, August, September, October, November, December	January 30 each year ¹
Annual Compliance Certification	Calendar year	January 30 each year ¹
Annual Emissions Inventory Report	Calendar year	March 31 each year ¹
Annual Emissions Statement ²	Calendar year	March 31 each year ¹
Notification of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 24 hours of the permittee learns of the event
Excess Emissions that Pose a Potential Imminent and Substantial Danger	As required	Within 12 hours of when permittee learns of event
Report of Malfunctions, Startup, Shutdowns, or Deviations with Excess Emission	As required	Within 72 hours of the notification
Deviation Report without Excess Emissions	As required	Along with semiannual reports ¹
Performance Testing Protocol	As required	No less than 45 days, but no more than 90 days, before the anticipated test date ¹
Performance Testing	As required	Within 60 days of end of test ¹
RATA Protocol	As required	No less than 21 days, but no more than 90 days, before the anticipated test date ¹
RATA Results	As required	Within 45 days of end of test for Part 75 sources or within 60 days for all others ¹

¹If the due date falls on a federal or Nevada holiday, or on any day the office is not normally open for business, the submittal is due on the next regularly scheduled business day.

² Required only for stationary sources that emit 25 tons or more of nitrogen oxide (NO_x) and/or emit 25 tons or more of volatile organic compounds (VOC) during a calendar year.

16. The Control Officer reserves the right to require additional reports and reporting to verify compliance with permit emission limits, applicable permit requirements, and requirements of applicable federal regulations. *[AQR 4.1]*

4.5 MITIGATION

The source has no federal offset requirements. *[AQR 12.7]*

5.0 PERMIT SHIELD

Permit Shield

- The source has requested a permit shield for applicable regulations in the following regulations (Table 5-1). [AQR 12.5.2.9]

Table 5-1: Applicable Requirements Related to Permit Shield

Citation	Title
40 CFR Part 60, Subpart Db	NSPS – Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 60, Subpart Dc	NSPS – Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 60, Subpart GG	NSPS – Stationary Gas Turbines
40 CFR Part 63, Subpart ZZZZ	NESHAP – Stationary Reciprocating Internal Combustion Engines

- Compliance with the terms contained in this permit shall be deemed compliance with the applicable requirements (Table 5-2) in effect on the date of permit issuance. [AQR 12.5.2.9]

Table 5-2: Permit Shield

EU	Regulation (40 CFR)	Regulatory Standard	Permit Limit	Value Comparison (in Units of the Permit Limit)			Averaging Period Comparison			Streamlining Statement for Shielding Purposes
				Standard Value	Permit Limit Value	Is Permit Limit Equal or More Stringent?	Standard Averaging Period	Permit Limit Averaging Period	Is Permit Limit Equal or More Stringent?	
A13	63.6640 (ZZZZ)	100 hours/year for testing and maintenance; 50 hours per year for non-emergency situations	100 hours/year for testing and maintenance; 50 hours per year for non-emergency situations	100/50	100/50	Yes	hours/year	hours/year	Yes	The permit limits are equal to the standard based on hours/year. Compliance with the permit demonstrates compliance with the standard.
A13	63.6603, Table 2d (ZZZZ)	Change oil and filter every 500 hours of operation or annually, whichever comes first; inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and replace as necessary; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. Sources have the option to utilize an oil analysis program as described in 63.6623(i) or (j) in order to extend the specified oil change requirement in Table 2d of this subpart.	Change oil and filter every 500 hours of operation or annually, whichever comes first; inspect air cleaners every 1,000 hours of operation or annually, whichever comes first; and inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. The Permittee may utilize an oil analysis program as described in Subpart 63.6623(i) in order to extend the specified oil change requirement and can petition the Control Officer pursuant to the requirements of 40 CFR 63.6(i) for alternative work practices.	500 or annually; 1,000 or annually; 500 or annually	500 or annually; 1,000 or annually; 500 or annually	Yes	hours or annually	hours or annually	Yes	The permit limits are equal to the standard based on hours or annually. Compliance with the permit demonstrates compliance with the standard.
A05	60.42b (Db)	0.20 lb/MMBtu SO ₂	0.13 lb/hr SO ₂	43.6	0.13	Yes	Not specified	Not specified	N/A	The permit limit is more stringent than the standard. Compliance with the permit demonstrates compliance with the standard.
A05	60.44b (Db)	0.20 lb/MMBtu NOx	12 ppm NOx @3%O ₂	170	12	Yes	30-day rolling average	4-hour rolling average	Yes	The permit limit is more stringent than the standard. Compliance with the permit demonstrates compliance with the standard.
A05	60.45c (Dc)	The owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in §60.48c(f) to demonstrate compliance with the SO ₂ standard, fuel is not subject to a emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.	30 ppmvd NOx @3%O ₂ 400 ppmvd CO @3%O ₂ Records and logs shall contain, at minimum, the following information: monthly and rolling 12-month quantity of natural gas fuel used for the Nebraska boiler in MMBtu	N/A	30; 400	N/A - there is no corresponding standard	N/A	4-hour rolling average	N/A - there is no corresponding standard	The recordkeeping requirement in the permit is more stringent than the standard. Compliance with the permit demonstrates compliance with the standard's recordkeeping requirement.
A01/A02	60.332 (GG)	0.0075% by volume NOx at 15% O ₂ dry basis	10 ppmvd NOx @15% O ₂ (natural gas) 17 ppmvd NOx @15% O ₂ (fuel oil)	75	10.17	Yes	4-hour rolling average	4-hour rolling average	Yes	The permit limit is more stringent than the standard. Compliance with the permit demonstrates compliance with the standard.
A01/A02	60.333 (GG)	0.015% by volume SO ₂ at 15% O ₂ dry basis	0.27 lb/hr SO ₂ (worst case combination of natural gas and diesel fuel combustion) 21.64 lb/hr SO ₂ (combustion of diesel fuel only)	345	0.27; 21.64	Yes	4-hour	1-hour	Yes	The permit limit is more stringent than the standard. Compliance with the permit demonstrates compliance with the standard.

6.0 ACID RAIN REQUIREMENTS

1. In accordance with the provisions of Title IV of the Clean Air Act and 40 CFR Parts 72 through 77, an Acid Rain Permit was issued to Saguaro Power Company.
2. All terms and conditions of the Acid Rain Permit are enforceable by DAQ and EPA under the Clean Air Act. *[40 CFR Part 72]*
3. The permittee shall comply with all the applicable requirements of the Acid Rain Permit application located in Attachment 2. *[40 CFR Part 72.30]*
4. This Acid Rain Permit incorporates the definitions of terms in 40 CFR Part 72.2.
5. This Acid Rain Permit is valid for a term of five years from the date of issuance unless a timely and complete renewal application is submitted to DAQ. *[40 CFR Part 72.69]*
6. A timely renewal application for an Acid Rain Permit is an application that is received at least six months prior to the permit expiration date. *[40 CFR Part 72.30]*
7. Emissions from this source shall not exceed any allowances that the source lawfully holds under Title IV of the Act or its regulations. *[AQR 12.5.2.6 and 40 CFR Part 70.6(a)(4)]*
8. Where an applicable requirement of the Act is more stringent than an applicable requirement of Title IV regulations, both provisions shall be incorporated into the permit and shall be enforceable. *[40 CFR Part 70.6(a)(1)(ii)]*

7.0 OTHER REQUIREMENTS

1. Any person who violates any provision of the AQRs, including, but not limited to, any application requirement; any permit condition; any fee or filing requirement; any duty to allow or carry out inspection, entry, or monitoring activities; or any requirements from DAQ is guilty of a civil offense and shall pay a civil penalty levied by the Air Pollution Control Hearing Board and/or the Hearing Officer of not more than \$10,000. Each day of violation constitutes a separate offense. *[AQR 9.1; NRS 445B.640]*
2. Any person aggrieved by an order issued pursuant to AQR 9.1 is entitled to review, as provided in Chapter 233B of the NRS. *[AQR 9.12]*
3. The permittee shall comply with the requirements of Title 40, Part 61 of the Code of Federal Regulations (40 CFR Part 61), Subpart M—the National Emission Standard for Asbestos—for all demolition and renovation projects. *[AQR 13.1(b)(8)]*
4. The permittee shall not use, sell, or offer for sale any fluid as a substitute material for any motor vehicle, residential, commercial, or industrial air conditioning system, refrigerator freezer unit, or other cooling or heating device designated to use a Class I or Class II ozone-depleting substance or any nonexempt substitute refrigerant as a working fluid, unless such fluid has been approved for sale in such use by the EPA Administrator. The permittee shall keep records of all paperwork relevant to the applicable requirements of 40 CFR Part 82 on-site. *[40 CFR Part 82]*
5. A risk management plan is required for the storing, handling and use of an applicable “Highly Hazardous Chemical” pursuant to 40 CFR Part 68. The permittee shall submit revisions of the risk management plan to the appropriate authority and a copy to DAQ. *[40 CFR Part 68.150(b)(3)]*

8.0 ADMINISTRATIVE REQUIREMENTS

8.1 GENERAL

1. The permittee shall comply with all conditions of the Part 70 OP. Any permit noncompliance may constitute a violation of the Clark County Air Quality Regulations (AQRs), Nevada law, and the Clean Air Act, and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a renewal application. *[AQR 12.5.2.6(g)(1)]*
2. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall be unaffected and remain valid. *[AQR 12.5.2.6(f)]*
3. The permittee shall pay all permit fees pursuant to AQR 18. *[AQR 12.5.2.6(h)]*
4. This permit does not convey property rights of any sort, or any exclusive privilege. *[AQR 12.5.2.6(g)(4)]*
5. The permittee agrees to allow inspection of the premises to which this permit relates by any authorized representative of the Control Officer at any time during the permittee's hours of operation without prior notice. The permittee shall not obstruct, hamper, or interfere with any such inspection. *[AQR 4.1; AQR 5.1.1; and AQR 12.5.2.8(b)]*
6. The permittee shall allow the Control Officer, upon presentation of credentials, to: *[AQR 4.1 and AQR 12.5.2.8(b)]*
 - a. Access and copy any records that must be kept under the conditions of the permit;
 - b. Inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - c. Sample or monitor substances or parameters for the purpose of assuring compliance with the permit or applicable requirements; and
 - d. Document alleged violations using such devices as cameras or video equipment.
7. Any permittee who fails to submit relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit the needed supplementary facts or corrected information. In addition, the permittee shall provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. A Responsible Official shall certify the additional information consistent with the requirements of AQR 12.5.2.4. *[AQR 12.5.2.2]*
8. Anyone issued a permit under AQR 12.5 shall post it in a location where it is clearly visible and accessible to facility employees and DAQ representatives. *[AQR 12.5.2.6(m)]*

9. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. *[AQR 12.5.2.6(g)(2)]*

8.2 MODIFICATION, REVISION, AND RENEWAL REQUIREMENTS

1. No person shall begin actual construction of a new Part 70 source, or modify or reconstruct an existing Part 70 source that falls within the preconstruction review applicability criteria, without first obtaining an Authority to Construct (ATC) from the Control Officer. *[AQR 12.4.1.1(a)]*
2. The permit may be revised, revoked, reopened and reissued, or terminated for cause by the Control Officer. The filing of a request by the permittee for a permit revision, revocation, reissuance, or termination, or of a notification of planned changes or anticipated noncompliance, does not stay any permit condition. *[AQR 12.5.2.6(g)(3)]*
3. The permit shall be reopened under any of the following circumstances and when all applicable requirements pursuant to AQR 12.5.2.15 are met: *[AQR 12.5.2.15(a)]*
 - a. New applicable requirements become applicable to a stationary source considered “major” (per the definition in AQR 12.2, AQR 12.3, or 40 CFR Part 70.3(a)(1)) with a remaining permit term of three or more years;
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under the Acid Rain Program;
 - c. The Control Officer or U.S. Environmental Protection Agency (EPA) determines that the permit contains a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
 - d. The EPA Administrator or the Control Officer determines that the permit must be revised or revoked to assure compliance with applicable requirements.
4. A permit, permit revision, or renewal may be approved only if all of the following conditions have been met: *[AQR 12.5.2.10(a)]*
 - a. The permittee has submitted to the Control Officer a complete application for a permit, permit revision, or permit renewal (except a complete application need not be received before a Part 70 general permit is issued pursuant to AQR 12.5.2.20); and
 - b. The conditions of the permit provide for compliance with all applicable requirements and the requirements of AQR 12.5.
5. The permittee shall not build, erect, install, or use any article, machine, equipment, or other contrivance, the use of which, without resulting in a reduction in the total release of air contaminants to the atmosphere, reduces or conceals an emission that would otherwise constitute a violation of an applicable requirement. *[AQR 80.1 and 40 CFR Part 60.12]*
6. No permit revisions shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. *[AQR 12.5.2.6(i)]*

7. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application has been submitted. *[AQR 12.5.2.11(b)]*
8. For purposes of permit renewal, a timely application is a complete application that is submitted at least six months, but not more than 18 months, prior to the date of permit expiration. If a source submits a timely application under this provision, it may continue operating under its current Part 70 OP until final action is taken on its application for a renewed Part 70 OP. *[AQR 12.5.2.1(a)(2)]*

9.0 ATTACHMENTS

9.1 APPLICABLE REGULATIONS

Requirements Specifically Identified as Applicable

1. NRS, Chapter 445B.
2. Applicable AQRs listed in Table 9-1.

Table 9-1: Applicable Clark County AQRs

Citation	Title
AQR Section 00	Definitions
AQR Section 04	Control Officer
AQR Section 05	Interference with Control Officer
AQR Section 08	Persons Liable for Penalties – Punishment: Defense
AQR Section 09	Civil Penalties
AQR Section 12.4	ATC Application and Permit Requirements for Part 70 Sources
AQR Section 12.5	Part 70 OP Requirements
AQR Section 13.2(b)(82)	NESHAP - Stationary Reciprocating Internal Combustion Engines
AQR Section 14.1(b)(4)	NSPS – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
AQR Section 14.1(b)(40)	NSPS – Standards of Performance for Stationary Gas Turbines
AQR Section 18	Permit and Technical Service Fees
AQR Section 25	Upset/Breakdown, Malfunctions
AQR Section 26	Emissions of Visible Air Contaminants
AQR Section 28	Fuel Burning Equipment
AQR Section 40	Prohibition of Nuisance Conditions
AQR Section 41	Fugitive Dust
AQR Section 42	Open Burning
AQR Section 43	Odors in the Ambient Air
AQR Section 70	Emergency Procedures
AQR Section 80	Circumvention

3. Clean Air Act Amendments (42 U.S.C. § 7401, et seq.)
4. Applicable 40 CFR sections are listed in Table 9-2.

Table 9-2: Federal Standards

Citation	Title
40 CFR Part 52.21	PSD
40 CFR Part 52.1470	SIP Rules
40 CFR Part 60, Subpart A	NSPS – General Provisions

Citation	Title
40 CFR Part 60, Subpart Db	NSPS – Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 60	Appendix A, Method 9 or equivalent (Opacity)
40 CFR Part 60, Subpart Dc	NSPS – Small Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 60, Subpart GG	NSPS – Standards of Performance for Stationary Gas Turbines
40 CFR Part 63, Subpart ZZZZ	NESHAP — Stationary Reciprocating Internal Combustion Engines
40 CFR Part 68	Chemical Accident Prevention Provisions
40 CFR Part 70	State Operating Permit Programs
40 CFR Part 72	Acid Rain Permits Regulation
40 CFR Part 73	Acid Rain Sulfur Dioxide Allowance System
40 CFR Part 75	Acid Rain Continuous Emission Monitoring
40 CFR Part 82	Protection of Stratospheric Ozone

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STEP 3

Read the standard requirements.

Permit Requirements

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

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Sulfur Dioxide Requirements, Cont'd.

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- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
 - (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

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of a new certificate of representation changing the designated representative;

STEP 3, Cont'd. Recordkeeping and Reporting Requirements, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with

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any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.


Effect on Other Authorities, Cont'd.

- to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4
Read the certification statement, sign, and date.

Certification

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name	Rob May
Signature	
Date	2-20-23